(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 6 May 2004 (06.05.2004)

PCT

(10) International Publication Number WO 2004/037799 A1

- (51) International Patent Classification⁷: C07D 295/10, 295/12, C08F 2/46, C09D 11/10, G03F 7/028
- (21) International Application Number:

PCT/EP2003/050729

- (22) International Filing Date: 17 October 2003 (17.10.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2002 1800/02

28 October 2002 (28.10.2002)

- (71) Applicant (for all designated States except US): CIBA SPECIALTY CHEMICALS HOLDING INC. [CH/CH]; Klybeckstrasse 141, CH-4057 Basel (CH).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): ULRICH, Thomas [DE/CH]; Speiserstrasse 40, CH-4600 Olten (CH). BOLLE, Thomas [DE/DE]; Bahnhofstrasse 3/2, 79588 Efringen-Kirchen (DE). DIETLIKER, Kurt [CH/CH]; Baselmattweg 132, CH-4123 Allschwil (CH). WOLF, Jean-Pierre [CH/CH]; Chilmetweg 6, CH-4464 Maisprach (CH). FUCHS, André [DE/DE]; Im Kirschgarten 19, 79418 Schliengen-Obereggenen (DE).

- (74) Common Representative: CIBA SPECIALTY CHEM-ICALS HOLDING INC.; Patent Department, Klybeckstrasse 141, CH-4057 Basel (CH).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: IMPROVEMENT IN THE STORAGE STABILITY OF PHOTOINITIATORS

$$R_{2} \xrightarrow{R_{3}} OH C C_{2}H_{5}$$

$$O = C C_{2}H_{5}$$

$$(I)$$

(57) Abstract: Compounds of formula (I), wherein R₁ is hydrogen or alkyl; R₂ is C₁-C₄alkoxy or a morpholino radical; and R₃ is hydrogen or C₁-C₄alkoxy, are suitable for improving the solubility of specific photoinitiators in formulations and accordingly enhance the storage stability of formulations comprising a photoinitiator and compounds of formula (I).